WHAT IS CLAIMED IS:

1. A recombinant plasmid vector which comprises:

a kanamycin resistance gene;

a promoter;

an endoxylanase signal sequence;

a nucleotide sequence coding for an oligopeptide consisting of 13 amino acids including 6 consecutive histidine residues; and,

a human granulocyte colony stimulating factor(hG-CSF) gene.

2. The recombinant plasmid vector of claim 1, wherein the oligopeptide has an amino acid sequence of isoleucine-glutamatic acid-glycine-arginine(Ile-Glu-Gly-Arg) at the C-terminus.

3. A recombinant plasmid vector, pTHKCSFmII represented in Figure 13 which comprises:

a kanamycin resistance gene;

a Trc promoter;

an endoxylanase signal sequence derived from *Bacillus* sp.;

a nucleotide sequence coding for an oligopeptide of SEQ ID NO: 1; and,

a modified gene coding for a human granulocyte colony stimulating factor(hG-CSF), which includes a nucleotide sequence of SEQ ID NO: 26 at the N-terminus.

4. A microorganism, *E. coli* transformed with the plasmid vector, pTHKCSFmII of claim 3.

5. The microorganism of claim 4, wherein the *E. coli*

is selected from the group consisting of *E. coli* XL1-Blue, *E. coli* MC4100, *E. coli* BL21(DE3), *E. coli* HB101 and *E. coli* W3110.

6. *E. coli* MC4100/pTHKCSFmII(KCTC 0754BP) transformed with the plasmid vector, pTHKCSFmII of claim 3.

7. A process for preparing a human granulocyte colony stimulating factor, which comprises the steps of:

culturing *E. coli* transformed with the plasmid vector of claim 1 to obtain a human granulocyte colony stimulating factor fusion protein; and,

treating the human granulocyte colony stimulating factor fusion protein with a protease to obtain a human granulocyte colony stimulating factor.

8. The process for preparing a human granulocyte colony stimulating factor of claim 7, wherein the plasmid vector of claim 1 is pTHKCSFmII.

9. The process for preparing a human granulocyte colony stimulating factor of claim 7, wherein the human granulocyte colony stimulating factor fusion protein is obtained from the culture by employing Ni-column.

10. The process for preparing a human granulocyte colony stimulating factor of claim 7, wherein the protease is Factor Xa.